

## ABSTRACT

In the engine muffler including a first expansion chamber 12 of the exhaust gas having an exhaust gas inlet aperture 11 connecting to an exhaust gas outlet of the engine, a second expansion chamber 14 having an exhaust gas outlet aperture 13, at least one first exhaust gas purifier 15 coated with a catalyst to purify the exhaust gas purifier provided with innumerable numbers of small holes, a wall side of said second expansion chamber 14 to which the engine is not installed is formed to a double-wall construction of walls 14a and 14b with a predetermined distance, further, the double-wall is packed with a heat insulating material to improve the purification efficiency, heat insulation and sound elimination. Heated muffler wall is decreased. It is also possible by applying a detachable construction to take out the first exhaust gas purifier outside the wall for replacement or cleaning. If there is no particular restriction in the gas purification concentration degree existed a catalyst is not applied to the exhaust gas purifier.